

ABSTRACT

A ground detection apparatus for electric automobile having a high-voltage DC power supply (31) which is electrically insulated from a body and a three-phase AC motor (33) which is driven by a DC voltage from the high-voltage DC power supply. A ground detection signal consisting of a square waveform is supplied to the DC power supply circuit through a detection resistor and a coupling capacitor, a voltage amplitude of a ground detection point serving as a connection point between the detection resistor (3) and the coupling capacitor (4) is detected, the detected voltage amplitude is converted into an insulation resistance on the basis of the relationship between a preset voltage amplitude and a preset insulation resistance, and levels of insulation resistance deterioration of the high-voltage DC power supply are detected by comparing the converted insulation resistance with a preset ground decision threshold value.